

ABSTRACT

An improved apparatus and method for determining the carrier frequency in a biphase coded signal such as the course acquisition code signal in a global position sensing system. The described system may also be used for other purposes. The described system is based on use of the conventional data signal squaring or frequency doubling step to remove biphase coding but performs a series of frequency reducing steps prior to applying the Fourier transformation sequence. The frequency reducing steps include heterodyne mixing and signal averaging. These frequency-reducing steps diminish the speed and capacity requirements imposed on the Fourier transformation sequence and thereby decrease the cost and complexity of the overall system.